

Amendments to the Claims

Please cancel Claims 2, 7, 10, and 16-35. Please amend Claims 1, 3-6, 8, 9, and 11-15. Please add new Claims 36-49. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (Currently amended) A method for the removal of airborne molecular contaminants (AMC) from a surface substrate, comprising:
 - contacting at least a portion of the ~~area surrounding a surface~~ substrate with a purified purge gas, ~~wherein the purified purge gas comprises~~ comprising oxygen[,] ~~and water or a combination thereof, and the purified purge gas has~~ having an AMC concentration less than about 1 part per billion (ppb) on a volume basis, the substrate contaminated with AMC before the substrate is contacted with purified purge gas;
 - producing a contaminated purge gas by transferring a portion of the contaminants from the surface substrate into the purified purge gas; and
 - removing the contaminated purge gas from the ~~area surrounding the surface~~ substrate,
 - thereby removing AMC from the substrate.
2. (Canceled).
3. (Currently amended) The method ~~as in claim 2 of claim 1,~~ wherein the method is repeated until the ~~contaminant concentration in the~~ contaminated purge gas ~~is~~ has an AMC concentration below about 1 ppb AMC on a volume basis.
4. (Currently amended) The method ~~as in claim 2 of claim 1,~~ wherein the AMC concentration of the purified purge gas ~~has a concentration of~~ is less than about 100 parts per trillion (ppt) ~~AMC~~ on a volume basis.

5. (Currently amended) The method ~~as in~~ of claim 2 1, wherein the purified purge gas ~~has a contaminant concentration of~~ is less than about 10 ppt AMC on a volume basis.
6. (Currently amended) The method ~~as in~~ of claim 2 1, wherein the AMC concentration of the purified purge gas ~~has a contaminant concentration of~~ is less than about 1 ppt AMC on a volume basis.
7. (Canceled).
8. (Currently amended) The method ~~as in claim 7~~ of claim 1, wherein the water comprises at least about 100 parts per million (ppm) ~~to about 2%~~ by volume of the purified purge gas.
9. (Currently amended) The method ~~as in~~ of claim 8, wherein the water comprises about 100 ppm to about 0.5% by volume of the purified purge gas.
10. (Canceled).
11. (Currently amended) The method of claim ~~10~~ 1, wherein the ~~device encloses~~ substrate comprises at least one silicon substrate.
12. (Currently amended) The method of claim ~~2~~ 1, wherein the ~~surface~~ substrate is ~~the~~ an interior surface of an ultrahigh purity gas line component.
13. (Currently amended) The method of claim ~~2~~ 1, wherein the ~~surface~~ substrate is the interior surface of a valve.
14. (Currently amended) The method ~~as in~~ of claim 2 1, further comprising purging the ~~device~~ substrate with an inert gas to remove at least one of oxygen and water after removing ~~said~~ the contaminated purge gas from ~~said device~~ the substrate.

15. (Currently amended) The method ~~as in~~ of claim 14, wherein ~~said~~ the inert gas is selected from the group consisting of nitrogen, argon, noble gases, methane and combinations thereof.

- 16-35. (Canceled).

36. (New) The method of claim 1, wherein the substrate is an electropositive surface.

37. (New) The method of claim 1, wherein the substrate is an electropolished surface.

38. (New) The method of claim 1, wherein the substrate is a wafer.

39. (New) The method of claim 1, wherein the purified purge gas is inert with respect to the AMC.

40. (New) The method of claim 1, wherein the purified purge gas comprises oxygen at a concentration between about 1% and 25% on a volume basis.

41. (New) The method of claim 1, wherein the purified purge gas comprises extra clean dry air and water.

42. (New) The method of claim 1, whereby the method removes AMC from the substrate at a faster rate than the method using a purge gas consisting essentially of nitrogen gas.

43. (New) The method of claim 1 further comprising:
purifying a purge gas to produce the purified purge gas for contacting with the substrate.

44. (New) The method of claim 1, wherein the method is performed at a temperature no higher than about 80°C.

45. (New) The method of claim 44, wherein the method is performed at a temperature no higher than about 50°C.
46. (New) A method for the removal of airborne molecular contaminants (AMC) from a substrate, comprising:
 - contacting at least a portion of the substrate with a purified purge gas, the purified purge gas comprising oxygen and water, the purified purge gas having an AMC concentration less than about 1 part per billion (ppb) on a volume basis;
 - producing a contaminated purge gas by transferring AMC from the substrate into the purified purge gas; and
 - removing the contaminated purge gas from the substrate, wherein the oxygen and water in the purified purge gas are in an amount sufficient to remove AMC from the substrate at a faster rate than the method using a purge gas consisting essentially of nitrogen gas.
47. (New) The method of claim 46, wherein the method is performed at a temperature no higher than about 80°C.
48. (New) The method of claim 47, wherein the purified purge gas is inert with respect to the AMC.
49. (New) The method of claim 48, wherein the purified purge gas comprises extra clean dry air and water.